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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/669,196
Filing Date: September 23, 2003
Appellant(s): BEAN ET AL.

Mitchell K. McCarthy
Re. No. 38,794
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 2, 2007 appealing from the Office action mailed August 2, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,774,643	Lubbers et al.	6-1998
5,379,411	Morgan et al.	1-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,774,643 of Lubbers et al. referred hereinafter "Lubbers".

In regards to claim 1, Lubbers discloses:

storing first information with first data, wherein the first information directly indicates the status of the first data. Lubbers discloses a disk drive storing blocks of data (see figure 2 and column 5 lines 49-54), indicating first data, along with FE blocks that identify whether data blocks are considered bad as to its reliability (see column 6 lines 43-53), indicating first information that directly indicates the status of the first data.

In regards to claim 2, Lubbers discloses:

wherein the status indicates a reliability of the first data (see figure 2 and column 6 lines 45-52).

In regards to claim 3, Lubbers discloses:

wherein the first information is a data reliability qualifier bit (see figure 2 and column 6 lines 45-52).

In regards to claim 4, Lubbers discloses:

wherein the first information is embedded with the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 5, Lubbers discloses:

wherein the first information is appended with the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 6, Lubbers discloses:

storing second information with second data, the second information indicating the status of the first data (see column 6 lines 64-65).

In regards to claim 7, Lubbers discloses:

wherein the second information is set to indicate that the first data is unreliable (see figure 2 and column 6 lines 64-65).

In regards to claim 8, Lubbers discloses:

accompanying first information with first data, wherein the first information indicates status of second data associated with the first data. Lubbers discloses a disk drive storing device specific information (see figure 2 and column 6 lines 18-22) such as ID and FE blocks, indicating accompanying first data with first information. Lubbers further discloses the disk drive storing blocks of data (column 5 lines 49-54), indicating second data. Lubbers also discloses wherein the FE blocks identify whether data blocks are considered bad as to its reliability (see column 6 lines 50-53), indicating first information that directly indicates the status of the second data associated with the first data.

In regards to claim 9, Lubbers discloses:

wherein the status indicates a reliability of the second data (see figure 2 and column 6 lines 43-52 and 64-65).

In regards to claim 10, Lubbers discloses:

wherein the first information is a data reliability qualifier (see figure 2 and column 6 lines 45-52).

In regards to claim 11, Lubbers discloses:

wherein the first data is parity data (see column 6 lines 45-52).

In regards to claim 12, Lubbers discloses:

wherein the first information is set to indicate that the second data is unreliable (see column 6 lines 64-65).

In regards to claim 13, Lubbers discloses:

storing second information to the second data, the second information indicating the status of the second data (see column 6 lines 45-52).

In regards to claim 14, Lubbers discloses:

wherein the second information is set to indicate that the second data is unreliable (see column 6 lines 45-52).

In regards to claim 15, Lubbers discloses:

storage areas (see figure 2); and

circuitry configured to perform at least one of a group consisting of a reading and a writing of the storage areas. Lubbers discloses disk drives are used for information handling and processing (see column 1 lines 20-25).

wherein at least one of the storage areas includes first information accompanying first data, wherein the first information indicates status of second data associated with the first data. Lubbers discloses a disk drive storing device specific information (see figure 2 and column 6 lines 18-22) such as ID and FE blocks, indicating first data accompanying first information. Lubbers further discloses the disk drive storing blocks of data (column 5 lines 49-54), indicating second data. Lubbers also discloses wherein the FE blocks identify whether data blocks are considered bad as to its reliability (see column 6 lines 50-53), indicating first information that directly indicates the status of the second data associated with the first data.

In regards to claim 16, Lubbers discloses:

wherein the circuitry includes a controller that is adapted to store the first information with the first data (see column 6 lines 64-65).

In regards to claim 17, Lubbers discloses:

wherein at least another of the storage areas includes second information stored with the second data that indicates a status of the second data (see figure 2 and column 6 lines 43-52).

In regards to claim 18, Lubbers discloses:

wherein the storage areas are in a RAID configuration (see column 5 lines 44-45).

In regards to claim 19, Lubbers discloses:

wherein the first information is appended to the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 20, Lubbers discloses:

wherein the first information is embedded in the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 21, Lubbers discloses:

wherein the first information and the first data are generated by the same function (see column 6 lines 44-45).

Claims 1-5,8-12, 15, 16, and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,379,411 of Morgan et al. referred hereinafter "Morgan".

In regards to claim 1, Morgan discloses:

storing first information with first data, wherein the first information directly indicates the status of the first data. Morgan discloses blocks of data with code bytes have a number of code bits and a block of configured data (see column 5 lines 55-60), indicating first information with first data. Morgan further discloses the code bits are reset to indicate the data transfer was successful, which indicates no fault in the configured data (see column 6 lines 23-28), thus indicating first information directly indicates status of first data associated with the first data.

In regards to claim 2, Morgan discloses:

wherein the status indicates a reliability of the first data (see column 6 lines 21-28).

In regards to claim 3, Morgan discloses:

wherein the first information is a data reliability qualifier bit (see column 5 lines 60-65 and column 6 lines 21-28).

In regards to claim 4, Morgan discloses:

wherein the first information is embedded with the first data (see column 5 lines 60-65).

In regards to claim 5, Morgan discloses:

wherein the first information is appended with the first data (see column 5 lines 60-65).

In regards to claim 8, Morgan discloses:

accompanying first information with first data, wherein the first information indicates status of second data associated with the first data. Morgan discloses blocks of data with code byte and check bytes, indicating accompanying first information with first data (see column 5 lines 60-65), and a block of configured data (see column 5 lines 55-60), indicating second data. Morgan further discloses the code byte is reset to indicate the data transfer was successful, which indicates no fault in the configured data (see column 6 lines 23-28), indicating first information indicates status of second data associated with the first data.

In regards to claim 9, Morgan discloses:

wherein the status indicates a reliability of the second data (see column 6 lines 23-28).

In regards to claim 10, Morgan discloses:

wherein the first information is a data reliability qualifier (see column 6 lines 23-28).

In regards to claim 11, Morgan discloses:

wherein the first data is parity data (see column 4 lines 15-25).

In regards to claim 12, Morgan discloses:

wherein the first information is set to indicate that the second data is unreliable (see column 6 lines 23-28).

In regards to claim 15, Morgan discloses:

storage areas (see column 4 lines 15-25); and

circuitry configured to perform at least one of a group consisting of a reading and a writing of the storage areas, wherein at least one of the storage areas includes first information accompanying first data, wherein the first information indicates status of second data associated with the first data. Morgan discloses blocks of data with code byte and check bytes, indicating

accompanying first information with first data (see column 5 lines 60-65), and a block of configured data (see column 5 lines 55-60), indicating second data. Morgan further discloses the code byte is reset to indicate the data transfer was successful, which indicates no fault in the configured data (see column 6 lines 23-28), indicating first information indicates status of second data associated with the first data.

In regards to claim 16, Morgan discloses:

wherein the circuitry includes a controller that is adapted to store the first information with the first data (see column 5 lines 55-65).

In regards to claim 18, Morgan discloses:

wherein the storage areas are in a RAID configuration. Morgan discloses parity bytes, indicating a RAID configuration (see column 4 lines 19-23).

In regards to claim 19, Morgan discloses:

wherein the first information is appended to the first data (see column 5 lines 60-65).

In regards to claim 20, Morgan discloses:

wherein the first information is embedded in the first data (see column 5 lines 60-65).

In regards to claim 21, Morgan discloses:

wherein the first information and the first data are generated by the same function (see column 5 lines 55-65).

(10) Response to Argument

Claim 1 rejection of Lubber '643:

In response to appellant argument regarding claim 1 (see page 6-8), appellant is arguing that Lubbers fails to disclose wherein the first information and the first data are stored together in the same block. Appellant first argues the plain meaning of the claimed term "with" is "together"(see page 6 lines 2-3). He further ties "together" or "with" to being within the same block or being stored according to a specific block address (see page 6 lines 5-9). He also states data stored in different blocks are clearly "apart", and as such, fails to conform to the meaning of "with" (see page 7 lines 1-10). Using his interpretation that "storing first information with first data" means "wherein the first information and the first data are stored together *in the same block*", he attempts to disprove the Lubbers reference by arguing that Lubbers disclose storing user data and metadata in different blocks (see page 7 lines 1-10), and as such, fails to disclose the claim limitation.

However, the claim limitations fail to cite wherein the first information and the first data are stored together *in the same block.* Even if examiner were to agree that "with" and "together" are somehow analogous, "storing first information and first data together" does not correspond to "storing first information and first data together *in the same block*". As such, examiner is not limited to such interpretation. Appellant is apparently trying to argue against limitations not set forth in the claims. Appellant is reminded that although the claims are interpreted in light of the specification, limitations from the specifications are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claim merely cites "storing first information with first data". Lubbers discloses a disk drive storing blocks of data (see figure 2 and column 5 lines 49-54), indicating first data, along with FE blocks that identify whether data blocks are considered bad as to its reliability (see

column 6 lines 50-53), indicating first information that directly indicates the status of the first data. Furthermore, the first information and first data are stored together in the same disk drive, as depicted by the table in Figure 2 and described in column 6 lines 5-10 and 20-25, which reads on the limitation "storing first information with first data". Argument is moot. Examiner maintains his rejection.

Claim 8 rejection of Lubber '643:

In response to appellant argument regarding claim 8 (see page 9-10), appellant has the same argument as claim 1. In addition to tying the claimed term "with" to "together", appellant ties the claimed term "accompanying" to "joining", stating the plain meaning of the term accompanying is "joining"(see page 9 lines 3-6). He further states the claim language means "the first information and the first data are joined together in the manner in which they are accessed and stored in the same block".

However, as stated above, the claim limitations fail to cite wherein the first information and the first data are joined together *in the same block.* The claim limitation "accompanying first information with first data" does not correspond to "first information and first data joined together *in the same block*". As such, examiner is not limited to such interpretation. Appellant is apparently trying to argue against limitations not set forth in the claims. Appellant is reminded that although the claims are interpreted in light of the specification, limitations from the specifications are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claim merely cites "accompanying first information with first data". Lubbers discloses a disk drive storing device specific information (see figure 2 and column 6 lines 18-22)

such as ID, indicating first data, and FE blocks, indicating first information. Lubbers further discloses the disk drive storing blocks of data (column 5 lines 49-54), indicating second data. Lubbers also discloses wherein the FE blocks identify whether data blocks are considered bad as to its reliability (see column 6 lines 50-53), indicating first information that directly indicates the status of the second data associated with the first data. Furthermore, the first information and first data are stored together in the same disk drive, as depicted by the table in Figure 2 and described in column 6 lines 5-10 and 20-25, which reads on the claim limitation "accompanying first information with first data". Argument is moot. Examiner maintains his rejection.

Claim 15 rejection of Lubber '643:

In response to appellant argument regarding claim 15 (see page 10-11), appellant has the same argument as claim 1 and 8. Like claim 8, appellant states the plain meaning of the term accompanying is "joining"(see page 8 lines 2-5). He further states the claim language means "the first information and the first data are joining each other in the manner in which they are accessed and stored in the same block".

However, as stated above, the claim limitations fail to cite wherein the first information and the first data are stored are joining each other *in the same block.* The claim limitation "first information accompanying first data" does not correspond to "first information and first data joining each other *in the same block*". As such, examiner is not limited to such interpretation. Appellant is apparently trying to argue against limitations not set forth in the claims. Appellant is reminded that although the claims are interpreted in light of the specification, limitations from the specifications are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claim merely cites "first information accompanying first data". Lubbers also discloses a disk drive storing device specific information (see figure 2 and column 6 lines 18-22) such as ID, indicating first data, and FE blocks, indicating first information. Lubbers further discloses the disk drive storing blocks of data (column 5 lines 49-54), indicating second data. Lubbers also discloses wherein the FE blocks identify whether data blocks are considered bad as to its reliability (see column 6 lines 50-53), indicating first information that directly indicates the status of the second data associated with the first data. Furthermore, the first information and first data are stored together in the same disk drive, as depicted by the table in Figure 2 and described in column 6 lines 5-10 and 20-25, which reads on the claim limitation "first information accompanying first data". Argument is moot. Examiner maintains his rejection.

Claim 1 rejection of Morgan '411:

In response to appellant argument regarding claim 1 (see page 11-12), "...By indicating the status of the first data, generally the first information must qualitatively characterize the data. For example, there is ample support in the specification that the present embodiments as claimed contemplates the first information indicating whether the first data is reliable (or "good") for processing by the host, as oppose to it being unreliable...

...

Appellant has argued without rebuttal by the Examiner that the code bits in Morgan '411 do not indicate the status of data, but rather they indicate what steps in the operations was taking place when a fault in the operation occurs...

...

The Examiner has not provided any evidence whatsoever that the code bits of Morgan '411 identically disclose storing first information with first data that directly indicates the status of the first data. The Examiner's claim construction is clearly erroneous for being unreasonably broad...." examiner respectfully disagrees.

Examiner notes the claim cites "the first information directly indicates the status of the first data". Morgan discloses blocks of data with code bytes have a number of code bits and a block of configured data (see column 5 lines 55-60), indicating first information with first data. Morgan further discloses the code bits are reset to indicate the data transfer was successful, which indicates no fault in the configured data (see column 6 lines 23-28). Since the code bits (first information) identifies the reliability or status of the configured data (first data), it directly indicates status of first data associated with the first data. Argument is moot. Examiner maintains his rejection.

Claim 8 and 15 rejection of Morgan '411:

In response to appellant argument regarding claim 8 and 15 (see page 15-17), "...This claim language plainly recites two sets of data. For example, there is ample support in the specification that the present embodiments as claimed contemplate the first information qualitatively characterizing both the user data and its parity data counterpart...

...

The Examiner's claim construction is clearly erroneous because it relies on a mischaracterization of what Morgan '411 actually discloses. That is, both steps 10 and 74 are actually performed on the same block of data, not first and second data as claimed....

...

The Examiner's claim construction is clearly erroneous for being based on a mischaracterization of what the cited reference actually discloses," examiner respectfully disagrees.

Appellant is trying to argue against limitations not set forth in the claims. Appellant states that Morgan discloses data stored on the same block, which is not first and second data as claimed (see page 16), implying that he interprets the first data and second data as being on different or separate blocks. However, such limitations are not disclosed in the claims. Appellant is reminded that although the claims are interpreted in light of the specification, limitations from the specifications are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claim merely cites "wherein the first information indicates status of the second data associated with the first data". Morgan discloses blocks of data with code byte and check bytes, indicating accompanying first information with first data (see column 5 lines 60-65), and a block of configured data (see column 5 lines 55-60), indicating second data. Morgan further discloses the code byte is reset to indicate the data transfer was successful, which indicates no fault in the configured data (see column 6 lines 23-28), indicating first information indicates status of second data associated with the first data.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

ecp
3/6/07

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